

Condensing the Patient Journey:  
**How data transparency  
reduces wait times,  
delay,  
and variability**

**Samantha McLachlan RN, MSN**  
**Manager Patient Flow**  
**Mackenzie Health**  
**Richmond Hill, Ontario**



Data and Dashboards  
CS46.03  
Wednesday June 8  
11:30am



# Condensing the Patient Journey

## Summary

Even when information is available to clinicians electronically, it is still siloed and requires repeated logins, phone calls and other interruptions to obtain.

To create more time for care and increase patient satisfaction, Mackenzie Health deployed a system that aggregates information from multiple systems and broadcasts it intuitively on all units, in the ED and in perioperative areas.

Real-time information on patient status and location, including patient placement, new orders and results, discharge targets and other critical decisions, helps staff prioritize their own actions and synchronize them with one another.

As a result, unnecessary steps, processes and even meetings have been discarded. Operational impacts include reductions in: wait time, patients holding in ED, in-hospital fractures and adverse events. Meanwhile, staff and physician engagement scores have increased.

# Condensing the Patient Journey

## Agenda

- Mackenzie Health
- Goals and Solution
- How it works
- Impacts in the organization
- Lessons learned

# Condensing the Patient Journey

## Learning Objectives

- Assess how visibility can help your organization
- Describe the impact of synchronizing staff in real time

# Mackenzie Health

- Regional healthcare provider formed to serve Southwest York Region
- Expanding to two-site hospital: New hospital in Vaughan in planning stages

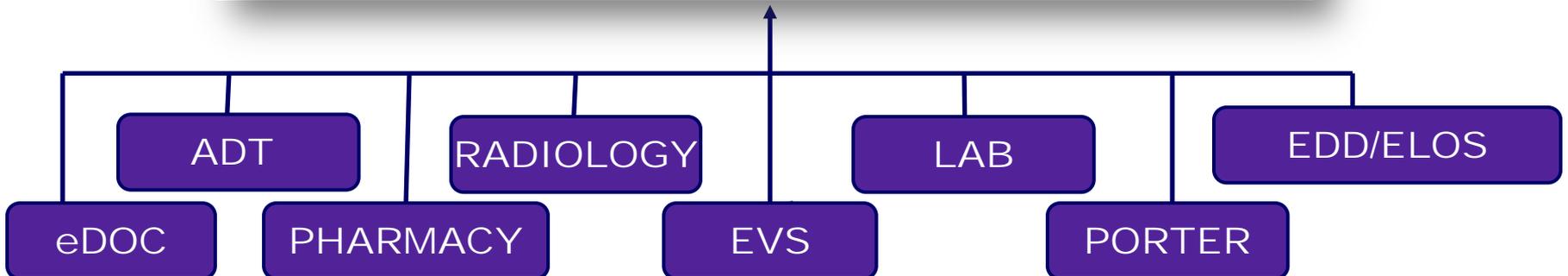
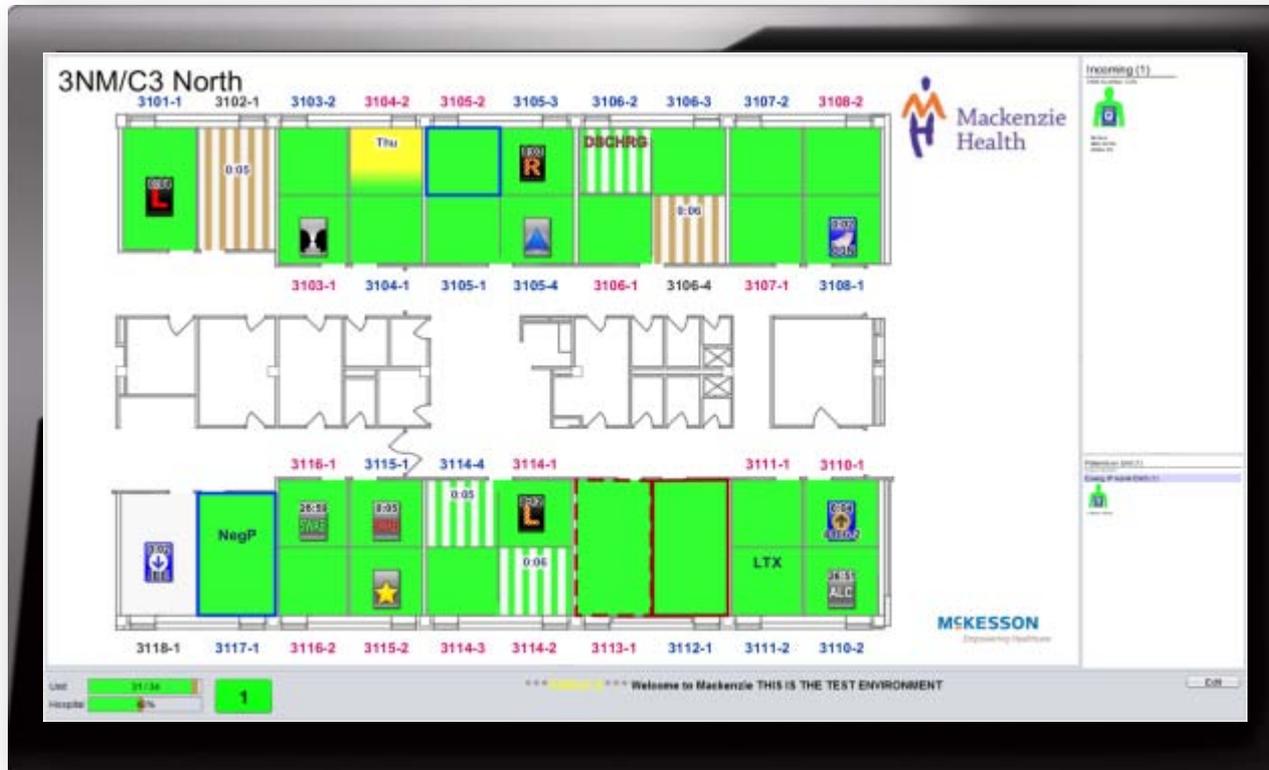
Total Beds	518
Total Admissions	19,525
Surgical Cases	9,126
Emergency Visits	92,993
Ambulatory Visits	229,378
Births	2,429
Diagnostic Tests	2.5+ million



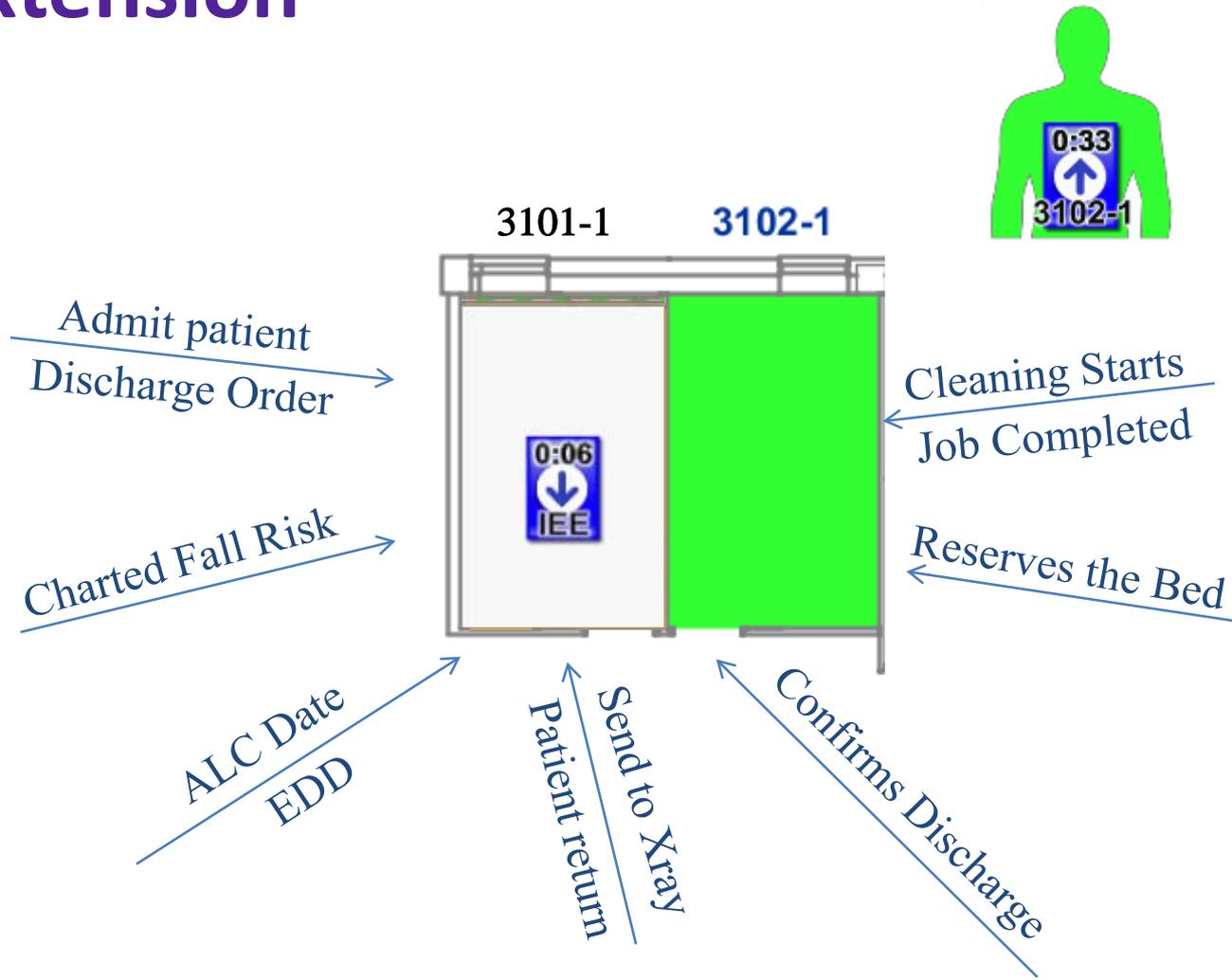
# Goals

- Reduce wait times for the patient
- Synchronize activities
- Discharge patient on time
- Improve patient flow
- Condense the journey

# Solution



# HIS Extension





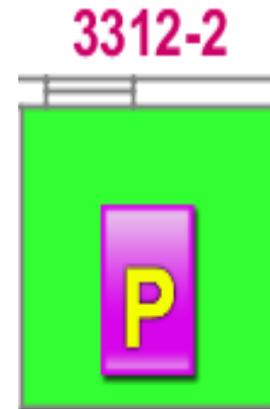
# Alerts and reminders



STAT ORDERS



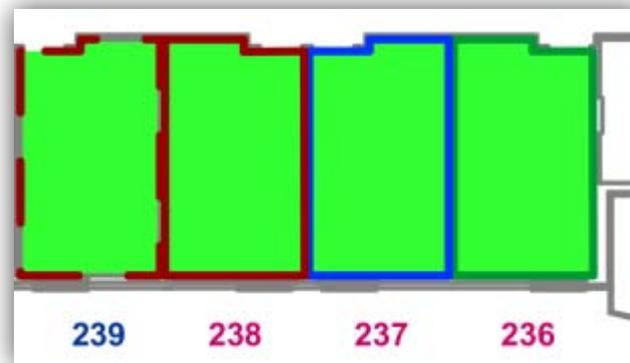
SWAB ORDERS



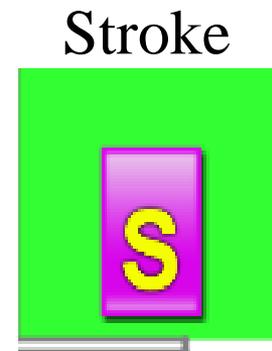
Pneumonia



CRITICAL RESULTS



INFECTION CONTROL



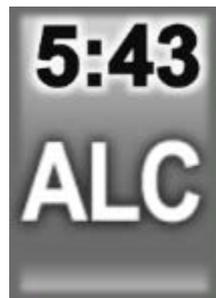
3312-1

# Alerts and reminders



**PATIENT SAFETY**

**QUALITY OF CARE**



**DISCHARGE PLANNING**

# Inpatient units





# Surgical Program

<b>D4 Incoming Patients (1)</b> D4	<b>SDA Bed Requests (3)</b> Same Day Admissions
<b>D4 (1)</b>  SDA	<b>Same Day Admissions (3)</b>    SDA SDA SDA
<b>C4N Incoming Patients (0)</b> C4N	<b>ED Bed Requests (0)</b> ED: Hip 1, ED: Hip 2, Emergency IP Admit (EMS), Emergency IP Admit (Green), Emergency IP Admit (Holding), Emergency IP Admit (Red), Emergency IP Admit (Yellow), Emergency Operating Room



# Flow Control Center



### Offsite (2)

 <p><b>0:02</b> Return</p>	 <p><b>0:04</b> CATH</p>
<p><b>MPV, ABO</b> MRN: 842405 A 0115H</p>	<p><b>3017-2</b> SHIRT, DRESS MRN: 710991</p>

### Pending Discharge (6)

#### 4NS (3)

 <p><b>0:04</b></p>	 <p><b>0:04</b> <b>0:03</b> FC</p>	 <p><b>DSCHRG</b></p>
<p><b>4108-2</b> AAFDROWN, BOB RNGEROTE, ROBERT [A] OLIS TESTING</p>	<p><b>4105-3</b> LESTRANGE, BELLAT [W] ORIF R HP</p>	<p><b>4103-1</b> HOPSTADTER, LEON/ CAMAZZOLA, DANIEL [A] RTHA</p>

#### C3N (3)

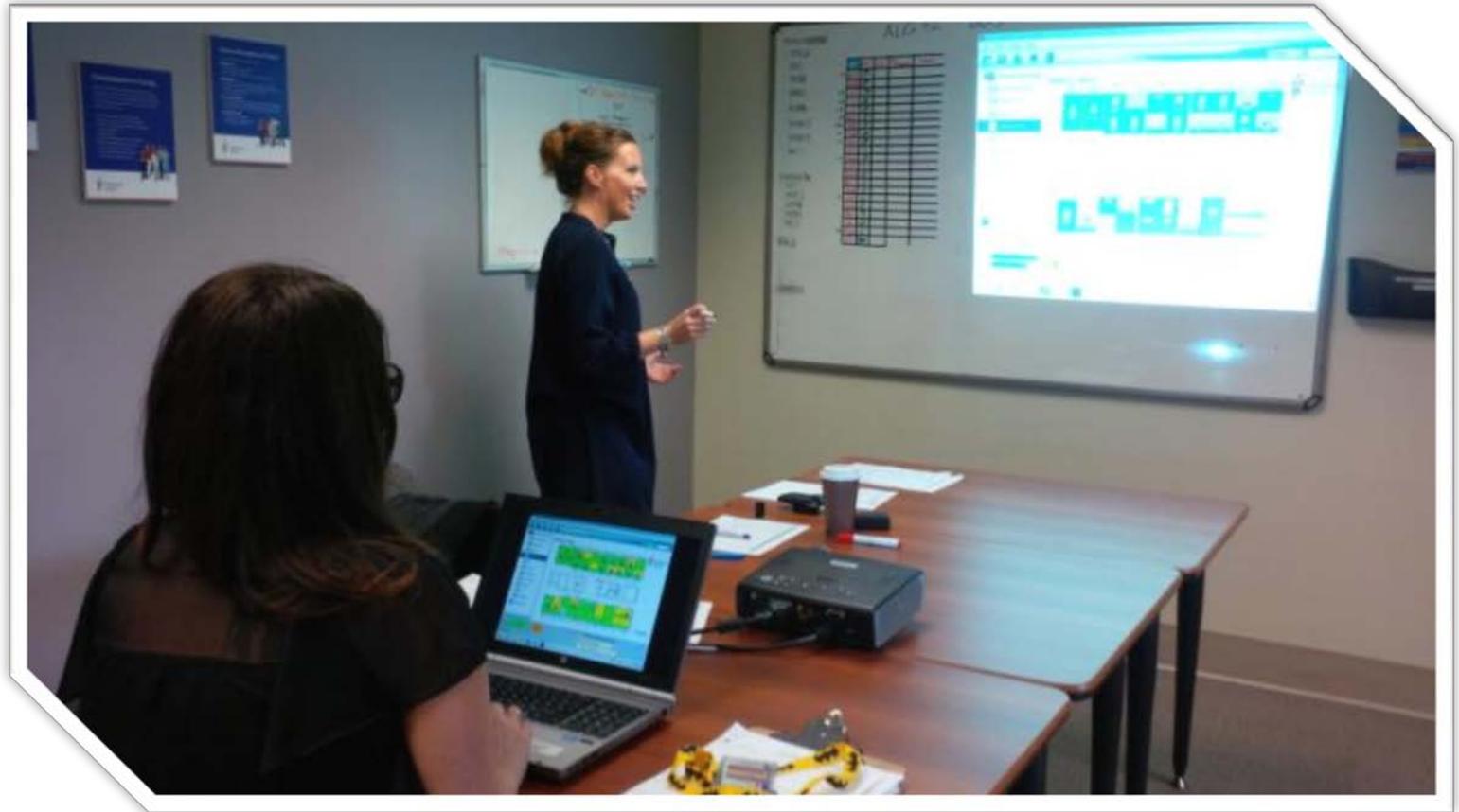
 <p><b>DSCHRG</b></p>	 <p><b>DSCHRG</b></p>	 <p><b>0:02</b></p>
<p><b>3114-2</b> WNYDAT, TEST ERIC MD</p>	<p><b>3106-2</b> MPV, TESTD WONG, SUNNY MD</p>	<p><b>3114-4</b> DUCK, JENNIFER BLAKELY, JOHN MD</p>

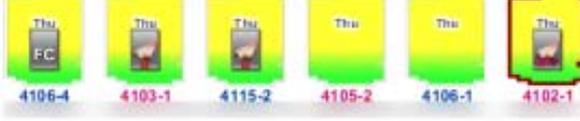
### Direct Admit (4)

#### Direct Admit

 <p><b>0:02</b> SBed</p>	 <p><b>0:02</b> SBed</p>	 <p><b>0:01</b> Telem</p>	 <p><b>EPI</b></p>
<p><b>REEVES, TIA</b> Sex: U Surgical Bed</p>	<p><b>kong, king</b> Sex: U Surgical Bed</p>	<p><b>test, mpv1</b> Sex: F Telemetry</p>	<p><b>test, mpv2</b> Sex: M ICU</p>

# Daily huddles



EDD>1d< (54)	EDD>1<2 (24)	EDD>2<3 (28)
<p>Enterprise</p> <p>A1 (1)</p>  <p>108-1</p> <p>A2 (6)</p>  <p>230 207 213 229 228 239</p> <p>C3 East (3)</p>  <p>3213-2 3211-1 3212-2</p> <p>C3 North (4)</p>  <p>3117-1 3115-1 3102-1 3110-2</p> <p>C4 East (3)</p>  <p>4213-2 4213-1 4213-3</p>	<p>Enterprise</p> <p>C3 East (1)</p>  <p>3213-2</p> <p>C3 North (1)</p>  <p>3115-1</p> <p>C4 North (7)</p>  <p>4116-1 4107-2 4104-2 4113-1 4105-4 4108-1</p>  <p>4111-1</p> <p>C4 South (2)</p>  <p>4312-2 4316</p> <p>D2 (6)</p>	<p>Enterprise</p> <p>A2 (6)</p>  <p>230 207 213 229 228 239</p> <p>C3 East (2)</p>  <p>3211-1 3212-2</p> <p>C3 North (3)</p>  <p>3117-1 3102-1 3110-2</p> <p>C4 East (3)</p>  <p>4213-2 4213-1 4213-3</p> <p>C4 North (7)</p>  <p>4106-4 4103-1 4115-2 4105-2 4106-1 4102-1</p>

Surge C

# Perioperative Patient Tracking



# Periop Family Waiting Area Visibility Board

How will I know where my loved one is...



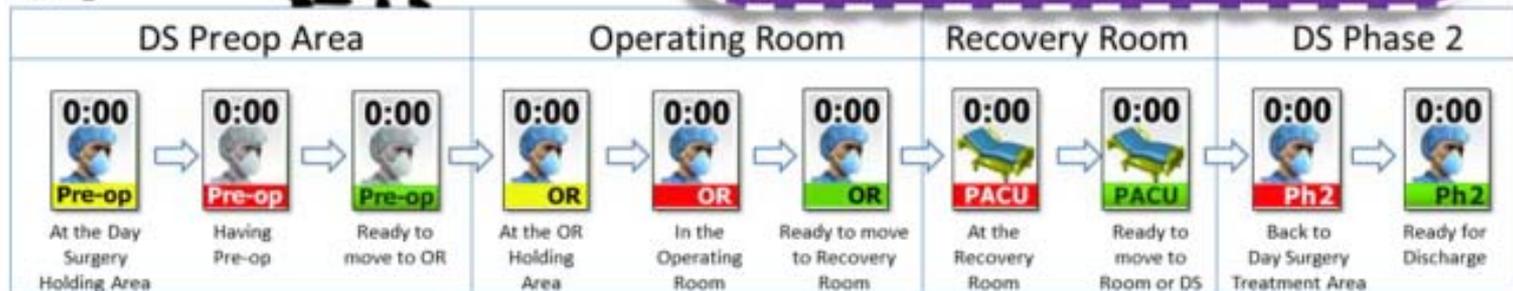
## What to look for...

Estimated Time Spent At Current Location (Hour:Minute)



Current Location

Pager Number



**PLEASE NOTE:** A patient *SILHOUETTE* may temporarily disappear from the board when sent for tests/procedures outside the surgery areas (e.g. Xray, MRI, etc.) and will re-appear when transferred back. Please check back later.



- Room has been requested



- Room has been assigned (Room & bed number)

# Executive Team Weekly Highlights



# Impacts



Phone Calls



Logins



Steps



Interruptions

Better synchronized transparent communication

## Lessons Learned

- Key to articulate the value proposition to help staff embrace change
- Advocating for patient confidentiality while delivering alerts that clinicians need to know is challenging
- Transparency compels real time data entry and eliminates delays in decision-making
- Visibility increases the efficiency and effectiveness of the staff
- It changes behaviors and creates a culture of shared accountability
- Indirectly it has increased safety and condensed the patient journey

**Visibility and transparency work!**

# Thank You

